ROY COOPER Governor ELIZABETH S. BISER Secretary MICHAEL ABRACZINSKAS Director



#### **DRAFT**

Mr. Robert B. Jordan IV Vice President / General Manager Jordan Lumber & Supply, Inc. P.O. Box 98 Mt. Gilead, North Carolina 27306

SUBJECT: Air Quality Permit No. 03469T30

Facility ID: 6200015

Jordan Lumber & Supply, Inc.

Mt. Gilead

Montgomery County Fee Class: Title V PSD Class: Major

Dear Mr. Jordan:

In accordance with your completed Air Quality Permit Applications for a renewal and modification of your Title V permit, we are forwarding herewith Air Quality Permit No. 03469T30 authorizing the construction and operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been identified as such in the permit. Please note the requirements for the annual compliance certification are contained in General Condition P in Section 4. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to file a petition for contested case hearing in the North Carolina Office of Administrative Hearings. Information regarding the right, procedure, and time limit for permittees and other persons aggrieved to file such a petition is contained in the attached "Notice Regarding the Right to Contest A Division of Air Quality Permit Decision."

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS



Mr. Robert B. Jordan IV Draft Page 2

143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Montgomery County has triggered increment tracking under PSD for  $PM_{10}$  and  $NO_x$ . However, this permit renewal/modification does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from DRAFT until DRAFT, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning these matters, please contact Jenny Sheppard at 919-707-8727 or <a href="mailto:jenny.sheppard@ncdenr.gov">jenny.sheppard@ncdenr.gov</a>.

Sincerely yours,

Mark J. Cuilla, EIT, CPM, Chief, Permitting Section Division of Air Quality, NCDEQ

#### Enclosure

c: Michael Sparks, EPA Region 4 (permit and review)
Fayetteville Regional Office
Laserfiche

# NOTICE REGARDING THE RIGHT TO CONTEST A DIVISION OF AIR QUALITY PERMIT DECISION

**Right of the Permit Applicant or Permittee to File a Contested Case:** Pursuant to NCGS 143-215.108(e), a permit applicant or permittee who is dissatisfied with the Division of Air Quality's decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 in the Office of Administrative Hearings within 30 days after the Division notifies the applicant or permittee of its decision. If the applicant or permittee does not file a petition within the required time, the Division's decision on the application is final and is not subject to review. The filing of a petition will stay the Division's decision until resolution of the contested case.

**Right of Other Persons Aggrieved to File a Contested Case:** Pursuant to NCGS 143-215.108(e1), a person other than an applicant or permittee who is a person aggrieved by the Division's decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 within 30 days after the Division provides notice of its decision on a permit application, as provided in NCGS 150B-23(f), or by posting the decision on a publicly available Web site. The filing of a petition under this subsection does not stay the Division's decision except as ordered by the administrative law judge under NCGS 150B-33(b).

General Filing Instructions: A petition for contested case hearing must be in the form of a written petition, conforming to NCGS 150B-23, and filed with the Office of Administrative Hearings, 1711 New Hope Church Road, Raleigh NC, 27609, along with a fee in an amount provided in NCGS 150B-23.2. A petition for contested case hearing form may be obtained upon request from the Office of Administrative Hearings or on its website at https://www.oah.nc.gov/hearings-division/filing/hearing-forms. Additional specific instructions for filing a petition are set forth at 26 NCAC Chapter 03.

**Service Instructions:** A party filing a contested case is required to serve a copy of the petition, by any means authorized under 26 NCAC 03 .0102, on the process agent for the Department of Environmental Quality:

William F. Lane, General Counsel North Carolina Department of Environmental Quality 1601 Mail Service Center Raleigh, North Carolina 27699-1601

If the party filing the petition is a person aggrieved other than the permittee or permit applicant, the party **must also** serve the permittee in accordance with NCGS 150B-23(a).

\* \* \*

Additional information is available at <a href="https://www.oah.nc.gov/hearings-division/hearing-process/filing-contested-case">https://www.oah.nc.gov/hearings-division/hearing-process/filing-contested-case</a>. Please contact the OAH at 984-236-1850 or oah.postmaster@oah.nc.gov with all questions regarding the filing fee and/or the details of the filing process.

## Summary of Changes to Permit

The following changes were made to Air Permit No. 03469T29:

| Page(s)       | Section             | Description of Change(s)                               |
|---------------|---------------------|--|
| Throughout    |                     | Converted to new permit format, corrected facility     |
|               |                     | name, updated permit number, and issue date            |
| Cover letter  |                     | Updated to latest permit shell format, added Notice of |
|               |                     | Right to Contest to cover letter, and moved            |
|               |                     | insignificant activities to Section 3 of the permit.   |
| 1 through 3   |                     | Updated Facility name, permit numbers, application     |
|               |                     | number, signature line, and to current permit shell    |
|               |                     | format. Updated table of contents. Moved List of       |
|               |                     | Acronyms to page 3.                                    |
| 4 and 5       | Section 1, Table    | Updated format for table note, removed bullet,         |
|               |                     | corrected control device ID for boiler B03, modified   |
|               |                     | the description for kiln 1 (ID No. K-1) and removed    |
|               |                     | kiln 8 (ID No. K-8) from the permit per the            |
|               |                     | application submitted in February 2022. Fixed format   |
|               |                     | of table note for kiln 7 (ID No.7).                    |
| 6 through 24  | Section 2 All       | Updated all formatting to match permit shell and       |
|               |                     | current permitting procedures. Starting in Section 2.1 |
|               |                     | A through 2.2 B updating all conditions to current     |
|               |                     | language and other permit language as it applies.      |
| 6 through 13  | Section 2.1 A       | Updated conditions 02D .0504 and .0521, added          |
|               |                     | standard testing paragraph (c.) removed testing        |
|               |                     | condition that referenced 112(j), removed              |
|               |                     | "RESERVED" and renumbered conditions below the         |
|               |                     | reserved section, corrected rule, and section          |
|               |                     | references (CFR and specific condition)                |
| 14 through 15 | Section 2.1 B       | Updated conditions 02D .0512 and .0521.                |
| 16            | Section 2.1 C       | Per the applicants request the two major changes for   |
|               |                     | this section, removed kiln 8 (ID No. K-8) from 02D     |
|               |                     | .0530 condition since it was never built, and the      |
|               |                     | applicant requested it be removed from the permit and  |
|               |                     | added Kiln 1 (ID No. K-1) to this section of 2.1 since |
|               |                     | the conversion to a direct gasified wood-fired kiln    |
|               |                     | was never completed submitted February 2022.           |
|               |                     | Removed condition 02D .1111 for MACT initial           |
| 4= 4          | a                   | notification for Kiln 8                                |
| 17 through 20 | Section 2.1 D       | Removed kiln 1 (ID No. K-1) from this section of the   |
|               |                     | permit.  |
|               |                     | Updated conditions 02D .0515, .0516, .0521, .0530,     |
|               |                     | and .0530(u) (updated format and clarification on      |
| 21.1 1.24     | 0 4 217             | emission sources subject)                              |
| 21 through 24 | Section 2.1 E       | Updated conditions 02D .0503, .0516, .0521, .0524,     |
| 25.1 1.25     | 0 1 22 1 15         | and .1111  |
| 25 through 26 | Section 2.2 A and B |  |
|               |                     | shell and conditions shell formatting                  |

| Page(s)    | Section     | Description of Change(s)                               |  |
|------------|-------------|--|--|
| 27         | Section 2.3 | Updated formatting with equipment and condition        |  |
|            |             | formatting, minor edits                                |  |
| 28         | Section 3   | Move Insignificant Activities to this section. Updated |  |
|            |             | formatting with equipment and table formatting,        |  |
|            |             | minor edits  |  |
| 29 thru 37 | Section 4   | General Conditions updated to current language         |  |
|            |             | (version 6.0, 01/07/2022)                              |  |



# State of North Carolina Department of Environmental Quality Division of Air Quality

# AIR QUALITY PERMIT

| Permit No. | Replaces Permit No. | Effective Date | Expiration Date |
|------------|---------------------|----------------|-----------------|
| 03469T30   | 03469T29            | DRAFT          | DRAFT           |

NOTE: Per General Condition K, a permit application for the renewal of this Title V permit shall be submitted no later than *[enter date six months prior to expiration date]*.

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: Jordan Lumber & Supply, Inc.

Facility ID: 6200015
Primary SIC Code: 2421
NAICS Code 321912

Facility Site Location: 1959 Highway 109 South

City, County, State, Zip: Mt. Gilead, Montgomery County, North Carolina 27306

Mailing Address: P.O. Box 98

City, State, Zip: Mt. Gilead, North Carolina 27306

**Application Number:** 6200015.20A and 6200015.22A

Complete Application Date: August 18, 2020 and February 15, 2022

Primary SIC Code: 2421

Division of Air Quality, Fayetteville Regional Office Regional Office Address: 225 Green Street, Suite 714

Fayetteville, North Carolina 28301-5094

Permit issued this the X<sup>th</sup> day of DRAFT, 2023.

Mark J. Cuilla, EIT, CPM, Chief, Permitting Section

By Authority of the Environmental Management Commission

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- 2.2 Multiple Emission Source(s) Specific Limitations and Conditions (Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
- 2.3 Permit Shield for Non-applicable Requirements

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SECTION 4: GENERAL PERMIT CONDITIONS

#### List of Acronyms

AOS Alternative Operating Scenario
Best Available Control Technology

**BAE** Baseline Actual Emissions

Btu British thermal unit CAA Clean Air Act

CAM Compliance Assurance Monitoring
CEMS Continuous Emission Monitoring System

**CEDRI** Compliance and Emissions Data Reporting Interface

**CFR** Code of Federal Regulations

**CO** Carbon Monoxide

**COMS** Continuous Opacity Monitoring System

**CSAPR** Cross-State Air Pollution Rule

**DAQ** Division of Air Quality

DEQ Department of Environmental Quality
EMC Environmental Management Commission

**EPA** Environmental Protection Agency

FR Federal Register

GACT Generally Available Control Technology

GHGs Greenhouse Gases
HAP Hazardous Air Pollutant

**LAER** Lowest Achievable Emission Rate

MACT Maximum Achievable Control Technology

NAA Non-Attainment Area

NAAQS National Ambient Air Quality Standards
NAICS North American Industry Classification System

NCAC North Carolina Administrative Code NCGS North Carolina General Statutes

**NESHAP** National Emission Standards for Hazardous Air Pollutants

NO<sub>X</sub> Nitrogen Oxides

NSPS New Source Performance Standard

**NSR** New Source Review

OAH Office of Administrative Hearings
PAE Projected Actual Emissions
PAL Plantwide Applicability Limitation

PM Particulate Matter

PM<sub>2.5</sub> Particulate Matter with Nominal Aerodynamic Diameter of 2.5 Micrometers or Less PM<sub>10</sub> Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less

**POS** Primary Operating Scenario

**PSD** Prevention of Significant Deterioration

**PTE** Potential to Emit

**RACT** Reasonably Available Control Technology

SIC Standard Industrial Classification SIP State Implementation Plan

SO<sub>2</sub> Sulfur Dioxide TAP Toxic Air Pollutant tpy Tons Per Year

VOC Volatile Organic Compound

# SECTION 1- PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

| Emission Source                            | ns a summary of all permitted emission sources an   | Control Device | control devices and appartenances.                                 |
|--|---|----------------|--|
| ID No.                                     | <b>Emission Source Description</b>  | ID No.         | <b>Control Device Description</b>                                  |
| B01  | Wood-fired boiler with pyrolytic-type   | C01            | One multicyclone (49 six-inch                                      |
| NSPS Dc                                    | burners and without flyash reinjection  | C01            | diameter tubes each)   |
| MACT DDDDD                                 | (26.8 million Btu per hour maximum  |                | diameter tuses each)   |
|  | heat input)   | AND            | AND  |
|  |   | ESP-1          | Electrostatic precipitator (6,666 square feet of collection area)  |
| B02<br>NSPS Dc                             | Wood-fired boiler with pyrolytic-type burners and without flyash reinjection  | C02            | One multicyclone (49 six-inch diameter tubes each)                 |
| MACT DDDDD                                 | (26.8 million Btu per hour maximum heat input)  | AND            | AND  |
|  |   | ESP-1          | Electrostatic precipitator (6,666 square feet of collection area)  |
| B03<br>NSPS Dc                             | Wood-fired boiler with pyrolytic-type burners and without flyash reinjection  | C03            | One multicyclone (49 six-inch diameter tubes each)                 |
| MACT DDDDD                                 | (26.8 million Btu per hour maximum heat input)  | AND            | AND  |
|  |   | ESP-2          | Electrostatic precipitator (6,666 square feet of collection area)  |
| B04  | Wood-fired boiler with pyrolytic-type   | C06A           | Two multicyclones (16 nine-  |
| NSPS Dc<br>MACT DDDDD                      | burners and without flyash reinjection (28.8 million Btu per hour max heat  | C06B           | inch diameter and 44 six-inch diameter tubes, respectively)        |
|  | input)  | AND            | AND  |
|  |   | ESP-2          | Electrostatic precipitator (6,666 square feet of collection area). |
| B05  | One natural gas-fired boiler (31.5  | NA             | NA   |
| NSPS Dc<br>MACT DDDDD                      | million Btu per hour maximum heat input)  |                |  |
| P01  | One planer/hog wood waste collection system   | BH01           | One bagfilter (7,555 square feet of filter area)                   |
| P02  | One planer/hog wood waste collection system   | C07<br>BH02    | One cyclone<br>One bagfilter (7,555 square feet<br>of filter area) |
| K-2<br>MACT DDDD<br>PSD BACT               | One direct gasified double track wood-<br>fired lumber kilns (30 million Btu per<br>hour maximum heat input rate each)      | NA             | NA   |
| K-1<br>MACT DDDD                           | One double track steam-heated lumber kiln   | NA             | NA   |
| K-3, K-4, and K-5<br>MACT DDDD<br>PSD BACT | Two single track steam-heated lumber kilns (ID Nos. K-3 and K-4) and One double track steam-heated lumber kiln (ID No. K-5) | NA             | NA   |

| Emission Source<br>ID No.           | Emission Source Description   | Control Device<br>ID No. | Control Device Description |
|-------------------------------------|---|--------------------------|----------------------------|
| K-6<br>MACT DDDD<br>PSD BACT        | Indirect steam-heated continuous double track lumber kiln (23.0 million Btu per hour maximum heat input rate; total potential operating rate of 93 million board feet per year)   | NA                       | NA                         |
| K-7 <sup>1</sup> MACT DDDD PSD BACT | One direct gasified wood-fired/natural gas-fired continuous double track lumber kiln³ (30 million Btu per hour maximum heat input rate when operated as a direct gasified wood-fired kiln; 24 million Btu per hour maximum heat input rate when operated as a direct natural gas-fired kiln; total potential operating rate of 67.34 million board feet per year) | NA                       | NA                         |

<sup>1</sup> The Permittee shall not simultaneously fire natural gas and wood in the direct gasified wood-fired/natural gas-fired continuous lumber kiln 7 (**ID No. K-7**).

#### **SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS**

#### 2.1 Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. Three wood-fired boilers without flyash reinjection (ID Nos. B01 through B03) with associated multicyclones (ID Nos. C01, C02, and C03) one per boiler, with the multicyclones (ID Nos. C01 and C02) connected in series to electrostatic precipitators (ID No. ESP-1) and the multicyclone (ID No. C03) connected in series with electrostatic precipitator (ID No. ESP-2) and One wood-fired boiler without flyash reinjection (ID No. B04) with associated multicyclones (ID Nos. C06A and C06B) in series with electrostatic precipitator (ID No. ESP-2).

The following table provides a summary of limits and standards for the emission source(s) described above:

| Pollutant                              | Limits/Standards                                | Applicable Regulation           |
|--|---|---------------------------------|
| Particulate Matter                     | (ID Nos. B01, B02, and B03 only)                | 15A NCAC 02D .0504              |
|  | 0.44 pounds per million Btu heat input          |                                 |
|  |   |                                 |
|  | (ID No. B04 only)                               |                                 |
|  | 0.41 pounds per million Btu heat input          |                                 |
| Sulfur Dioxide                         | 2.3 pounds per million Btu heat input           | 15A NCAC 02D .0516              |
| Visible Emissions                      | 20 percent opacity                              | 15A NCAC 02D .0521              |
| -                                      | Records of amount of wood combusted during each | 15A NCAC 02D .0524              |
|  | day [40 CFR 60.48c(g)]                          | 40 CFR Part 60, Subpart Dc      |
| HC1                                    | 2.2E-02 pounds per million Btu of heat input    | 15A NCAC 02D .1111              |
| Mercury                                | 5.7E-06 pounds per million Btu of heat input    | 40 CFR Part 63, Subpart DDDDD   |
| Carbon Monoxide                        | 1,500 ppmvd @ 3% O <sub>2</sub>                 |                                 |
| Particulate Matter or                  | 3.7E-02 pounds per million Btu of heat input or |                                 |
| Total Selected Metals                  | 2.4E-04 pounds per million Btu of heat input    |                                 |
| Odors                                  | State-enforceable only                          | 15A NCAC 02D .1806              |
|  | See Section 2.2 A.1                             |                                 |
| Particulate Matter (PM)                | Less than 144 tons per year                     | 15A NCAC 02Q .0317              |
| Particulate Matter (PM <sub>10</sub> ) | Less than 121 tons per year                     | Avoidance of 15A NCAC 02D .0530 |
| Nitrogen Oxides                        | Less than 108.4 tons per year                   |                                 |
| Carbon Monoxide                        | Less than 287 tons per year                     |                                 |
|  | See Section 2.2 A.2                             |                                 |
| Multiple Pollutants                    | Recordkeeping and reporting of actual emissions | 15A NCAC 02D .0530(u)           |
|  | (Application No. 6200015.18A)                   |                                 |
|  | Affected Emission Units:                        |                                 |
|  | Boilers (ID Nos. B01 through B04)               |                                 |
|  | See Section 2.2 B.1                             |                                 |

#### 1. 15A NCAC 02D .0504: PARTICULATES FROM WOODBURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of wood that are discharged from these boilers (**ID Nos. B01 through B03**) into the atmosphere shall not exceed 0.44 pounds per million Btu heat input.
- b. Emissions of particulate matter from the combustion of wood that are discharged from this boiler (**ID No. B04**) into the atmosphere shall not exceed 0.41 pounds per million Btu heat input.

#### **Testing** [15A NCAC 02O .0508(f)]

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504.

d. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit above by testing the boilers (**ID Nos. B01 and B03**) for particulate matter in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in General Condition JJ. Testing for boilers (**ID Nos. B01 and B03**) shall be completed as specified in Section 2.1 A.5.s, below. If the results of this test are above the limits given in Section 2.1 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504.

#### Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- e. Particulate matter emissions from these boilers (**ID Nos. B01 through B04**) shall be controlled by five multicyclones (**ID Nos. C01 through C03, C06A, and C06B**) as described above. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance requirement must include the following:
  - i. a monthly external visual inspection of the system ductwork and material collection units for leaks; and
  - an annual (for each 12-month period following initial inspection) internal inspection of the multicyclones' structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504 if the multicyclones and ductwork are not inspected and maintained.

- f. The results of inspections and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each inspection;
  - iii. a report of any maintenance performed on any control device; and
  - iv. any variance from manufacturer's recommendations, if any, and any corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504 if these records are not maintained.

#### **Reporting** [15A NCAC 02Q .0508(f)]

- g. Within 30 days of a written request from the DAQ, the Permittee shall submit a report of any maintenance performed on any control device.
- h. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Section 2.1 A.1. e and f above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

#### 2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these boilers (**ID Nos. B01 through B04**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

#### **Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

#### Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of wood in these boilers (**ID Nos. B01 through B04**).

#### 3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these boilers (**ID Nos. B01 through B04**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

#### **Testing** [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit above by testing boilers (**ID Nos. B01 and B03**) for visible emissions in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in General Condition JJ. Testing for boilers (**ID Nos. B01 and B03**) shall be completed as specified in Section 2.1 A.5.s, below. If the results of this test are above the limit given in Section 2.1 A.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

#### Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- d. To ensure compliance, once a day the Permittee shall observe the emission points of these boilers (**ID Nos. B01 through B04**) for any visible emissions above normal. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three days of absent observations per semi-annual period. If the emission source is not operating, a record of this fact along with the corresponding date and time shall substitute for the daily observation. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.3.a above.

The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required daily observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

- e. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

#### **Reporting** [15A NCAC 02Q .0508(f)]

f. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section 2.1 A.3.d and e above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

# 4. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units)

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR 60, Subpart Dc, including Subpart A "General Provisions."

#### Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- b. The Permittee shall record and maintain records of the amount of each fuel combusted during each operating day. As an alternative, the Permittee can elect to record and maintain records of the amount of each fuel combusted during each calendar month. [40 CFR 60.48c(g)(1) and (2)]
- c. The Permittee shall maintain these records for a period of two years following the date of such record. [40 CFR 60.48c(i)]
- d. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the amount of fuel is not recorded or the records are not maintained as specified in Section 2.1 A.4.b and c.

#### 5. 15A NCAC 02D .1111: MAXIMUM ACHEIVABLE CONTROL TECHNOLOGY

#### Applicability [40 CFR 63.7485, 40 CFR 63.7490(d), 40 CFR 63.7499(i), (p)]

a. The Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."

#### **Definitions and Nomenclature**

b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply. [40 CFR 63.7575]

#### 40 CFR Part 63 Subpart A General Provisions

c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR 63 Subpart DDDDD. [40 CFR 63.7565]

#### **Compliance Date** [40 CFR 63.7510(e), 40 CFR 63.56(b)]

- d. The Permittee shall:
  - i. Complete the initial tune up and the one-time energy assessment as required in Section 2.1 A.5.u and v no later than May 20, 2019.
  - ii. Complete the initial compliance requirements in Section 2.1 A.5.l and m no later than November 16, 2019 and according to the applicable provisions in 40 CFR 63.7(a)(2).
  - iii. The Permittee shall be subject to the requirements of this standard, 40 CFR 63, Subpart DDDDD starting **May 20, 2019**. Note that the requirements of this standard, 40 CFR 63, Subpart DDDDD may require action on behalf of the Permittee prior to **May 20, 2019**.

#### **General Compliance Requirements,**

- e. At all times the affected unit(s) is operating, the Permittee shall be in compliance with the emission standards in Section 2.1 A.5.i except during periods of startup and shutdown. During startup and shutdown, the Permittee shall comply only with Section 2.1 A.5.w. [40 CFR 63.7505(a)]
- f. The Permittee shall demonstrate compliance with all applicable emission limits using performance stack testing, fuel analysis, or continuous monitoring systems (CMS), including a continuous emission monitoring system (CEMS), or particulate matter continuous parameter monitoring system (PM CPMS), where applicable. The Permittee may demonstrate compliance with the applicable emission limit for hydrogen chloride (HCl) or mercury using fuel analysis if the emission rate calculated according to 40 CFR 63.7530(c) is less than the applicable emission limit. Otherwise, the Permittee shall demonstrate compliance for HCL or mercury using performance stack testing. [40 CFR 63.7505(c)]
- g. If the Permittee demonstrates compliance with any applicable emission limit through performance testing and subsequent compliance with operating limits through the use of CMS (including CPMS, CEMS or COMS), the Permittee shall:
  - i. Develop a site-specific monitoring plan according to the requirements in 40 CFR 63.7505(d)(1) through (2) for the use of any CMS. The Permittee shall submit this site-specific monitoring plan, if requested, at least 60 days before the initial performance evaluation of the CMS. [40 CFR 63.7505(d)]
  - ii. Conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan. [40 CFR 63.7505(d)(3)]
  - iii Operate and maintain the CMS in continuous operation according to the site-specific monitoring plan. [40 CFR 63.7505(d)(4)]
- h. At all times, the Permittee shall operate and maintain any affected source (as defined in 40 CFR 63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

**Emission Limits** [15A NCAC 02Q .0508(f), 40 CFR 63.7500(a)(1), Table 2]

i. The affected unit(s) shall meet the following emission limits except during startup and shutdown:

| Pollutant  | Emission Limit                                  |  |  |
|--|---|--|--|
| Hydrochloric Acid (HCl)  | 2.2E-02 pounds per million Btu of heat input    |  |  |
| Mercury (Hg)   | 5.7E-06 pounds per million Btu of heat input    |  |  |
| Carbon Monoxide (CO)  a dry basis corrected to 3 percent oxygen, 30-d average) |   |  |  |
| Filterable Particulate Matter (PM) or  | 3.7E-02 pounds per million Btu of heat input or |  |  |
| Total Suspended Metals (TSM)   | 2.4E-04 pounds per million Btu of heat input    |  |  |

ii. The Permittee, as an alternative to meeting the emission limits in Section 2.1 A.5.i.i above for PM (or TSM), HCl, or mercury on a boiler-specific basis, may demonstrate compliance by emissions averaging, if the averaged emissions are not more than 90 percent of the applicable emission limit, according to the procedures in 40 CFR 63.7522. An implementation plan shall be submitted to the DAQ no later than 180 days before the date that the facility intends to demonstrate compliance using the emission averaging option.

#### **Testing** [15A NCAC 02Q .0508(f)]

j. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test(s) are above the limit given in Section 2.1 A.5.i above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

#### Notifications [15A NCAC 02Q .0508(f), 40 CFR 63.7545(d), 40 CFR 63.7530]

- k. The Permittee shall submit the following notifications:
  - i. A notification of intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. [40 CFR 63.7(b)(1), 40 CFR 63.9(e), 40 CFR 63.7545(d)]
  - ii. A notification of intent to conduct a performance evaluation of the CMS(s) simultaneously with the notification of the performance test date required, or at least 60 days prior to the date the performance evaluation is scheduled to begin if no performance test is required. [40 CFR 63.8(e)]
  - iii. For the initial compliance demonstration for each affected source, the Permittee shall submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for boilers (**ID Nos. B01 through B04**). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8) of 40 CFR 63.7545 as applicable.

[40 CFR 63.9(h)(3), 40 CFR 63.10(d)(2), 40 CFR 63.7545(e)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these notification requirements are not met.

#### **Initial Testing, Fuel Analysis and CMS Requirements** [15A NCAC 02Q .0508(f)]

- 1. For each boiler that is required or that will demonstrate compliance with any of the applicable emission limits in Section 2.1 A.5.i through performance (stack) testing, the initial compliance requirements include the following: [40 CFR 63.7510(a)]
  - i. Conduct performance tests according to 40 CFR 63.7520;
  - ii. Conduct a fuel analysis for each type of fuel burned in the boiler as required according to 40 CFR 63.7521 and Table 6 to 40 CFR 63 Subpart DDDDD, except as specified in 40 CFR 63.7510(a)(2)(i) through (iii) and establish maximum fuel pollutant input levels according to 40 CFR 63.7530(b)(1) through (3), as applicable;
  - iii. Establish operating limits according to 40 CFR 63.7530 and Table 7 to 40 CFR 63 Subpart DDDDD; and
  - iv. Conduct CMS performance evaluations according to 40 CFR 63.7525.
- m. For each boiler or process heater that the Permittee elects to demonstrate compliance with the applicable emission limits in for HCl and/or mercury through fuel analysis, the initial compliance requirement includes the following:
  - Conduct a fuel analysis for each type of fuel burned in the boiler as required according to 40 CFR 63.7521
  - ii. Establish operating limits according to 40 CFR 63.7530 and Table 8 to 40 CFR 63Subpart DDDDD.
  - iii. The fuels described in 40 CFR 63.7510(a)(2)(i) and (ii) are exempt from these fuel analysis and operating limit requirements. The fuels described in paragraph 40 CFR 63.7510(a)(2)(ii) are exempt from the chloride fuel analysis and operating limit requirements.
- n. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 A.5 1 and Section 2.1 A.5.m are not met.

#### Monitoring Requirements [15A NCAC 02Q .0508(f)]

- o. The Permittee shall install, operate, and maintain the following CMS:
  - i. operating load monitors according to 40 CFR 63.7525(d);
  - ii. continuous oxygen trim systems, according to 40 CFR 63.7525(d) [40 CFR 63.7525(a)]; and
  - iii. COMS, according to 40 CFR 63.7525(c)
- p. The Permittee shall monitor and collect data according to 40 CFR 63.7535 and the site-specific monitoring plan required in Section 2.1 A.5 g.
- q. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 A.5.0 and Section 2.1 A.5.p are not met.

#### Operating Limits [15A NCAC 02Q .0508(f)]

- r. The Permittee shall maintain:
  - i. the 30-day rolling average operating load of each unit such that it does not exceed 110 percent of the highest hourly average operating load recorded during most recent performance test;
  - ii. and operate the oxygen trim systems with the oxygen level set no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test. If multiple performance tests are conducted, set the minimum oxygen level at the lower of the minimum values established during the performance tests;
  - iii. opacity to less than or equal to 10 percent opacity or the highest hourly average opacity reading measured during the performance test run demonstrating compliance with the PM (or TSM) emission limitation (daily block average).]
  - iv. for HCL and/or mercury, if using fuel analysis alone, the 12-month rolling average at or below the applicable emission limit.

[40 CFR 63.7500(a)(2), 40 CFR 63.7525(a)(7), 40 CFR 63.7540, Table 4 and 8 to 40 CFR 63 Subpart DDDDD] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

#### Subsequent performance tests and fuel analyses requirements [15A NCAC 02Q .0508(f), 40 CFR 63.7515]

- s. The Permittee shall:
  - i. conduct subsequent performance tests on an annual basis, except as specified in 40 CFR 63.7515. Annual performance tests must be completed no more than 13 months after the previous performance test, except as specified in 40 CFR 63.7515; and
  - ii if complying with the HCL and/or mercury emission limits on fuel analysis alone, conduct fuel analyses on a monthly basis, except as specified in 40 CFR 63.7515.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

# <u>Continuous Compliance with the emission limitations, fuel specifications</u> [15A NCAC 02Q .0508(f), 40 CFR 63.7540]

- t. The Permittee shall demonstrate continuous compliance with each emission limit and operating limit that applies according to the methods specified in 40 CFR 63.7540 and Table 8 of 40 CFR 63, Subpart DDDDD, including the following:
  - i. Following the date on which the initial compliance demonstration is completed or is required to be completed, whichever date comes first, operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits listed in Table 4 of 40 CFR 63 Subpart DDDDD except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Operating limits must be confirmed or reestablished during performance tests.
  - ii. As specified in 40 CFR 63.7555(d), you must keep records of the type and amount of all fuels burned in each boiler or process heater during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would result in either of the following:
    - (A) Equal to or lower emissions of HCl and mercury than the applicable emission limit for each pollutant, if you demonstrate compliance through fuel analysis.
    - (B) Equal to or lower fuel input of chlorine and mercury than the maximum values calculated during the last performance test, if you demonstrate compliance through performance testing.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

#### Work Practice Standards [15A NCAC 02Q .0508(f)]

- u. 5-Year Tune-Up Requirements -The Permittee shall conduct a tune-up of the boilers every five years as specified in 40 CFR 63.7540(a)(10)(i) through (vi). The Permittee shall conduct the tune-up while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up. The burner inspection specified in 40 CFR 63.7540(a)(10)(i) may be delayed until the next scheduled or unscheduled unit shutdown, but the burner must be inspected at least once every 72 months. [40 CFR 63.7500(a), 40 CFR 63.7540(a)(10) and (a)(12)]
  - i. Each tune-up shall be conducted no more than 61 months after the previous tune-up. [40 CFR 63.7515(d)]
  - ii. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13), 40 CFR 63.7515(g)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these tune-up requirements in are not met.

- v. One Time Energy Assessment The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must address the requirements in 40 CFR 63 Subpart DDDDD, Table 3, Item 4, with the extent of the evaluation for items (a) to (e) in Table 3, Item 4 appropriate for the on-site technical hours listed in 40 CFR 63.7575: [40 CFR 63.7500(a)(1), Table 3] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met. Note that the energy assessment must be conducted prior to May 19, 2019.
- w. Startup and Shutdown Requirements The Permittee shall comply with all applicable emission limits at all times except as follows:
  - i. During startup, the Permittee shall meet the work practice requirements below.
    - (A) All CMS shall be operated during startup.
    - (B) One or a combination of the following clean fuels shall be used: Natural gas, synthetic natural gas, propane, other Gas 1 fuels, distillate oil, syngas, ultra-low sulfur diesel, fuel oil-soaked rags, kerosene, hydrogen, paper, cardboard, refinery gas, liquefied petroleum gas, clean dry biomass, and any fuels meeting the appropriate HCl, mercury and TSM emission standards by fuel analysis.
    - (C) The Permittee has the option of complying using either of the following work practice standards:
      - (1) If complying using definition (1) of "startup" in 40 CFR 63.7575, once the Permittee starts firing fuels that are not clean fuels, the Permittee shall vent emissions to the main stack(s) and engage all of the applicable control devices. Startup ends when steam or heat is supplied for any purpose, OR
      - (2) If complying using definition (2) of "startup" in 40 CFR 63.7575, once the Permittee starts to feed fuels that are not clean fuels, the Permittee shall vent emissions to the main stack(s) and engage all of the applicable control devices so as to comply with the emission limits within 4 hours of start of supplying useful thermal energy. The Permittee shall engage and operate PM control within one hour of first feeding fuels that are not clean fuels. The Permittee shall start all applicable control devices as expeditiously as possible, but, in any case, when necessary to comply with other standards applicable to the source by a permit limit or a rule other than this section that require operation of the control devices. The Permittee shall develop and implement a written startup and shutdown plan, as specified in 40 CFR 63.7505(e).
  - ii. During shutdown, the Permittee shall meet the work practice requirements below.
    - (A) The Permittee shall operate all CMS during shutdown.
    - (B) While firing fuels that are not clean fuels during shutdown, the Permittee shall vent emissions to the main stack(s) and operate all applicable control devices when necessary to comply with other standards applicable to the source that require operation of the control device.
    - (C) If, in addition to the fuel used prior to initiation of shutdown, another fuel must be used to support the shutdown process, that additional fuel must be one or a combination of the following clean fuels: Natural gas, synthetic natural gas, propane, other Gas 1 fuels, distillate oil, syngas, ultra-low sulfur diesel, refinery gas, and liquefied petroleum gas.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

#### Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.7555(a)(2)]

- x. The Permittee shall keep the following:
  - i. a copy of each notification and report submitted to comply with 40 CFR Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]

- ii. records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.7555(a)(2)]
- iii. maintain on-site and submit, if requested by the Administrator, an annual report containing the information in 40 CFR 63.7540(a)(10)(vi).
- iv. for each CMS, records according to 40 CFR 63.7555(b).
- v. records required in Table 8 of 40 CFR 63 Subpart DDDDD including records of all monitoring data and calculated averages for applicable operating limits, such as opacity, pressure drop, pH, and operating load, to show continuous compliance with each emission limit and operating limit that applies. [40 CFR 63.7555(c)]
- vi. the applicable records in 40 CFR 63.7555(d).
- vii. (A) records in a form suitable and readily available for expeditious review;
  - (B) each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
  - (C) each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years. [40 CFR 63.7560, 40 CFR 63.10(b)(1)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

#### Reporting Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.7550]

- y. The Permittee shall submit a compliance report to the DAQ on a semi-annual basis, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June.
  - i. The first compliance report shall be postmarked on or before July 30, 2019 and cover the period from May 20, 2019 through June 30, 2019.
  - ii. The compliance reports shall also be submitted electronically to the EPA via the procedures in 40 CFR 63.7550(h).
- z. The compliance report shall contain:
  - i. the information in 40 CFR 63.7550(c) as applicable.
  - ii. For each deviation from an emission limit or operating limit, the report shall contain the information in 40 CFR 63.7550(d) and (e) as applicable. This includes any deviations from your site-specific monitoring plan.
- aa. within 60 days after the date of completing each performance test (defined in 40 CFR 63.2) including any associated fuel analyses as required by 40 CFR 63 Subpart DDDDD, the Permittee shall submit the results to the DAQ pursuant to 40 CFR 63.10(d)(2) and to the EPA via the procedures in 40 CFR 63.7550(h).
- bb. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 A.5.y through Section 2.1 A.5.bb are not met.

# B. One planer/hog wood waste collection systems (ID No. P01) with associated bagfilter (ID No. BH01) and

One planer/hog wood waste collection systems (ID No. P02) with associated cyclone (ID No. C07) in series with a bagfilter (ID No. BH02)

The following table provides a summary of limits and standards for the emission source(s) described above:

| Pollutant          | Limits/Standards                                   | Applicable Regulation |
|--------------------|--|-----------------------|
| Particulate Matter | Adequate ductwork and properly designed collectors | 15A NCAC 02D .0512    |
| Visible Emissions  | 20 percent opacity                                 | 15A NCAC 02D .0521    |
| Odors              | State-enforceable only                             | 15A NCAC 02D .1806    |
|                    | See Section 2.2 A.1                                |                       |

#### 1. 15A NCAC 02D 0512: PARTICULATES FROM WOOD PRODUCTS FINISHING PLANTS

a. The Permittee shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to be discharged from any stack, vent, or building into the atmosphere without providing, as a minimum for its collection, adequate ductwork and properly designed collectors. In no case shall the ambient air quality standards be exceeded beyond the property line.

#### Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- b. Particulate matter emissions from the two planer/hog wood waste collection systems (**ID Nos. P01 and P02**) shall be controlled by a cyclone (**ID No. C07**) and bagfilters (**ID Nos. BH01 and BH02**) as described above. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any. As a minimum, the inspection and maintenance program shall include:
  - i. a monthly external inspection of the ductwork, cyclone, and bagfilters noting the structural integrity; and
  - ii. an annual (for each 12-month period following the initial inspection) internal inspection of the bagfilters noting the structural integrity and the condition of the filters.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if the ductwork, cyclone, and bagfilters are not inspected and maintained.

- c. The results of inspections and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each inspection; and
  - iii. the results of maintenance performed on any control device.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if these records are not maintained.

#### **Reporting** [15A NCAC 02Q .0508(f)]

- d. The Permittee shall submit the results of any maintenance performed on any control device within 30 days of a written request by the DAQ.
- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Section 2.1 B.1.b and c above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

#### 2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the two planer/hog wood waste collection systems (**ID Nos. P01 and P02**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

#### **Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

#### Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once every six months the Permittee shall observe the emission points of the two planer/hog wood waste collection systems (ID Nos. P01 and P02) for any visible emissions above normal. The six-month observation must be made once per six-month calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
  - take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 B.2.a above.

The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required six month observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

#### **Reporting** [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section 2.1 B.2.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

#### C. Four steam-heated lumber kilns (ID Nos. K-1, K-3, K-4, and K-5)

The following table provides a summary of limits and standards for the emission source(s) described above:

| Pollutant                              | Limits/Standards                                      | Applicable Regulation           |
|--|---|---------------------------------|
| Volatile Organic                       | 4.09 pounds per thousand board feet, as pinene        | 15A NCAC 02D .0530              |
| Compounds                              | For lumber kilns ( <b>ID Nos. K-3, K-4, and K-5</b> ) |                                 |
| Hazardous Air Pollutants               | National Emission Standards for Hazardous Air         | 15A NCAC 02D .1111              |
|  | Pollutants for Plywood and Composite Wood             | 40 CFR Part 63, Subpart DDDD    |
|  | Products Manufacturing                                |                                 |
|  |   |                                 |
|  | No applicable requirements other than initial         |                                 |
|  | notification  |                                 |
| Odors                                  | State-enforceable only                                | 15A NCAC 02D .1806              |
|  | See Section 2.2 A.1                                   |                                 |
| Particulate Matter (PM)                | Less than 144 tons per year                           | 15A NCAC 02Q .0317              |
| Particulate Matter (PM <sub>10</sub> ) | Less than 121 tons per year                           | Avoidance of 15A NCAC 02D .0530 |
| Nitrogen Oxides                        | Less than 108.4 tons per year                         |                                 |
| Carbon Monoxide                        | Less than 287 tons per year                           |                                 |
|  | See Section 2.2 A.2                                   |                                 |

#### 1. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to comply with the Best Available Control Technology (BACT), the three lumber kilns (**ID Nos. K-3, K-4, and K-5** facility shall discharge into the atmosphere no more than 4.09 pounds of volatile organic compounds per thousand board feet, as pinene.

#### Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- b. To ensure compliance with the limits in Section 2.1 C.1.a above, the Permittee shall keep the following records on a monthly basis and make these records available to DAQ upon request:
  - i. the types (species) of woods processed in each kiln; and
  - ii. the total throughput (thousand board feet) for each type of wood processed in each kiln.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these requirements are not maintained.

#### D. One direct gasified wood-fired lumber kiln (ID No. K-2), One indirect steam-heated continuous double track lumber kiln (ID No. K-6) One direct gasified wood-fired/natural gas-fired continuous lumber kiln (ID No. K-7)<sup>1</sup>, and

The following table provides a summary of limits and standards for the emission source(s) described above:

| Pollutant                              | Limits/Standards  | Applicable Regulation        |
|--|---|------------------------------|
| Particulate Matter                     | $E = 4.10 \text{ x P}^{0.67} \text{ (for P} \le 30 \text{ tons per hour)}$      | 15A NCAC 02D .0515           |
|  | $E = 55.0 \text{ x } P^{0.11} - 40 \text{ (for } P > 30 \text{ tons per hour)}$ |                              |
|  | Where: $E =$ allowable emission rate in pounds per hour                         |                              |
|  | P = process weight in tons per hour   |                              |
| Sulfur Dioxide                         | 2.3 pounds per million Btu heat input   | 15A NCAC 02D .0516           |
| Visible Emissions                      | 20 percent opacity  | 15A NCAC 02D .0521           |
| Volatile Organic                       | 4.34 pounds per thousand board feet, as pinene                                  | 15A NCAC 02D .0530           |
| Compounds                              | Affected Emission Unit:   |                              |
|  | Kilns 2 and 7 ( <b>ID Nos. K-2, and K-7</b> )                                   |                              |
|  | 4.09 pounds per thousand board feet, as pinene                                  |                              |
|  | Affected Emission Unit:   |                              |
|  | Kiln 6 ( <b>ID No. K-6</b> )  |                              |
| NOx                                    | Recordkeeping and reporting of actual emissions                                 | 15A NCAC 02D .0530(u)        |
|  | (Application No. 6200015.20B)   |                              |
|  | Affected Emission Unit:   |                              |
|  | Kiln 7 ( <b>ID No. K-7</b> )  |                              |
| Hazardous Air Pollutants               | National Emission Standards for Hazardous Air                                   | 15A NCAC 02D .1111           |
|  | Pollutants for Plywood and Composite Wood Products                              | 40 CFR Part 63, Subpart DDDD |
|  | Manufacturing   |                              |
|  | No applicable requirements other than initial                                   |                              |
|  | notification  |                              |
| Odors                                  | State-enforceable only  | 15A NCAC 02D .1806           |
|  | See Section 2.2 A.1   |                              |
| Particulate Matter (PM)                | Less than 144 tons per year   | 15A NCAC 02Q .0317           |
| Particulate Matter (PM <sub>10</sub> ) | Less than 121 tons per year   | Avoidance of 15A NCAC 02D    |
| Nitrogen Oxides                        | Less than 108.4 tons per year   | .0530                        |
| Carbon Monoxide                        | Less than 287 tons per year   |                              |
|  | See Section 2.2 A.2   |                              |

#### 1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from the lumber kilns (**ID Nos. K-2, K-6 and K-7**) shall not exceed an allowable emission rate as calculated by the following equation:

 $E = 4.10 \text{ x P}^{0.67}$  (for process rates less than or equal to 30 tons per hour), or

 $E = 55.0 \text{ x P}^{0.11} - 40$  (for process rates greater than 30 tons per hour)

Where: E = allowable emission rate in pounds per hour

P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

<sup>&</sup>lt;sup>1</sup> The Permittee shall not simultaneously fire natural gas and wood in the direct gasified wood-fired/natural gas-fired continuous lumber kiln (**ID No. K-7**).

#### **Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

#### Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. The Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above (or the formulas contained in 15A NCAC 02D .0515) can be derived, and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the production records are not maintained.
- d. No reporting is required for particulate emissions from the lumber kilns (ID Nos. K-2, K-6 and K-7).

#### 2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the lumber kilns (**ID Nos. K-2 and K-7**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

#### **Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

#### Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the lumber kilns (ID Nos. K-2, and K-7).

#### 3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the lumber kilns (**ID Nos. K-2, K-6, and K-7**) shall not exceed 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

#### **Testing** [15A NCAC 02O .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

#### Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the lumber kilns (**ID Nos. K-2, K-6, and K-7**).

#### 4. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. i. In order to comply with Best Available Control Technology (BACT), the lumber kiln (**ID No. K-6**) shall discharge into the atmosphere no more than 4.09 pounds volatile organic compounds (VOC) per thousand board feet (bf), as pinene.
  - ii. The Permittee shall maintain a 12-month rolling total production of less than 93 million board feet per year (million bf/yr) from the continuous double track lumber kiln (**ID No. K-6**).

#### Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- b. To ensure compliance with the limits in Section 2.1 D.4.a, above, the Permittee shall keep the following records for lumber kiln (**ID No. K-6**) on a monthly basis and make these records available to DAQ upon request:
  - i. the types (species) of woods processed in the lumber kiln,
  - ii. the total throughput (thousand board feet) for each type of wood processed in the kiln,

- iii. the Permittee shall maintain a 12-month rolling average of less than 93 million board feet per year (million bf/yr) from the continuous double track lumber kiln (**ID No. K-6**) and
- iv. the Permittee shall submit a summary report of the monitoring and recordkeeping activities postmarked or delivered on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit shall be clearly identified.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the 12-month rolling average production exceeds 93 million board feet per year from the lumber kiln (**ID No. K-6**) or if these above requirements are not maintained.

#### 5. 15A NCAC 02D .0530(u): PREVENTION OF SIGNIFICANT DETERIORATION

a. The Permittee has used projected actual emissions of NOx to avoid applicability of prevention of significant deterioration requirements for the project to convert lumber kiln (**ID No. K-7**) to a direct wood-fired gasifier/natural gas-fired continuous lumber kiln as specified in Air Permit Application Nos. 6200015.16B, 6200015.17B, and 6200015.20B. In order to verify the assumptions used in the projected actual emissions calculations, the Permittee shall comply with the recordkeeping and reporting requirements in Sections 2.1 D.5.b through d below.

#### Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- b. The Permittee shall maintain records of actual NOx emissions from the lumber kiln (**ID No. K-7**) in tons per year on a calendar year basis for ten years following the resumption of regular operations after the conversion of lumber kiln (**ID No. K-7**). The Permittee shall make the information documented and maintained under this condition available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).
- c. The Permittee shall submit a report of NOx emissions to the Director within 60 days after the end of each calendar year during which the records in Section 2.1 D.5.b above must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a-c).
- d. The reported actual emissions for each of the ten calendar years will be compared to the respective projected actual emissions of NOx as indicated below:

| Pollutant | Projected Actual Emissions* (Tons per Year) |
|-----------|---|
| NOx       | 39.55                                       |

The projected actual emissions are not enforceable limitations. If the reported actual emissions exceed the projected actual emissions, the Permittee shall include in its annual report an explanation as to why actual emissions exceeded the projected actual emissions.

#### 6. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements in accordance with 15A NCAC 02D .0530, "Prevention of Significant Deterioration of Air Quality" as promulgated in 40 CFR 51.166.

b. The following emission limits shall not be exceeded:

| Emission Source   | Pollutant       | BACT Limit                          | Averaging<br>Period | Technology                          |
|---|-----------------|-------------------------------------|---------------------|-------------------------------------|
| One direct gasified wood-fired/ natural gasfired continuous lumber kiln ( <b>ID No. K-7</b> ) | VOC (as pinene) | 4.34 pounds per thousand board feet | n/a                 | Good design and operating practices |

c. To ensure compliance with the emission limits given in Section 2.1 D.6.b above, the Permittee shall not exceed 67.34 million board feet per year of lumber dried in the direct gasified wood-fired/natural gas-fired continuous lumber kiln (**ID No. K-7**).

#### **Testing** [15A NCAC 02Q .0508(f)]

d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.6.b above, the Permittee shall be deemed in

noncompliance with 15A NCAC 02D .0521.

#### Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- e. The Permittee shall operate and maintain the direct gasified wood-fired/ natural gas-fired continuous lumber kiln (**ID No. K-7**) in accordance with the manufacturer's specifications or a site-specific plan approved by the NC DAQ Regional Administrator. The Permittee shall record any maintenance performed on the kiln each month in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.
- f. To ensure compliance with the limits in Section 2.1 D.6.b above, the Permittee shall calculate the following:
  - i. the monthly production rate and the 12-month production rate of the lumber kiln (ID No. K-7).
  - ii. the monthly VOC emissions and the 12-month VOC emissions from lumber kiln (**ID No. K-7**). VOC emissions shall be determined by multiplying the total amount of lumber dried in the kilns by an emission factor of 4.34 pounds of VOC emissions per thousand board feet of lumber dried.
- g. The Permittee shall record the production rates and VOC emissions specified in Sections 2.1 D.6.f above each month in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.
- h. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the 12-month rolling total production exceeds 67.34 million board feet per year from lumber kiln (**ID No. K-7**) or if the monitoring and recordkeeping activities in Sections 2.1 D.6.e through g above are not met.

#### **Reporting** [15A NCAC 02Q .0508(f)]

- i. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.1 D.6.e through g above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
  - i. The monthly volatile organic compound emissions from the lumber kiln (**ID No. K-7**) the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
  - ii. The monthly quantities of lumber dried in the lumber kiln (**ID No. K-7**) each kiln for the previous 17 months. The amount of lumber dried must be calculated for each of the 12-month periods over the previous 17 months
  - iii. All instances of deviations from the requirements of this permit shall be clearly identified.

#### 7. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to comply with Best Available Control Technology (BACT), the lumber kiln (ID No. K-2) shall discharge into the atmosphere no more than 4.34 pounds of volatile organic compounds (VOC) per thousand board feet, as pinene.

#### Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- b. To ensure compliance with the limits in Section 2.1 D.7.a above, the Permittee shall keep the following records on a monthly basis and make these records available to DAO upon request:
  - i. the types (species) of woods processed in the lumber kiln; and
  - ii. the total throughput (thousand board feet) for each type of wood processed in the lumber kiln.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these requirements are not maintained.

#### E. Natural gas-fired boiler (ID No. B05)

The following table provides a summary of limits and standards for the emission source(s) described above:

| Pollutant                            | Limits/Standards   | Applicable Regulations                              |
|--------------------------------------|--|---|
| Particulate Matter                   | 0.45 pounds per million Btu heat input   | 15A NCAC 02D .0503                                  |
| Sulfur Dioxide                       | 2.3 pounds per million Btu heat input  | 15A NCAC 02D .0516                                  |
| Visible Emissions                    | 20 percent opacity   | 15A NCAC 02D .0521                                  |
| Particulate Matter<br>Sulfur Dioxide | Record monthly fuel use  | 15A NCAC 02D .0524<br>40 CFR Part 60, Subpart Dc    |
| Hazardous Air Pollutants             | Work practice standards (ID No. B05)   | 15A NCAC 02D .1111<br>40 CFR Part 63, Subpart DDDDD |
| Multiple Pollutants                  | Recordkeeping and reporting of actual emissions (Application Nos. 6200015.18A)  Affected Emission Unit: Boiler (ID No. B05)  See Section 2.2 B.1 | 15A NCAC 02D .0530(u)                               |

#### 1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas that are discharged from this boiler (**ID No. B05**) into the atmosphere shall not exceed 0.45 pounds per million Btu heat input.

#### **Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

#### Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas in this boiler (**ID No. B05**).

#### 2. 15A NCAC 02D .0516; SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from this boiler (ID No. B05) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

#### **Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

#### Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping is required for sulfur dioxide emissions from firing of natural gas in this boiler (**ID No. B05**).

#### 3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from this boiler (**ID No. B05**) shall not be more than 20 percent opacity when averaged over a sixminute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

#### **Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

#### Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas in this boiler (ID No. B05).

#### 4. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions."

#### Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- b. The Permittee shall record and maintain records of the amount of each fuel fired in this boiler (**ID No. B05**) during each operating day. As an alternative, the Permittee can elect to record and maintain records of the amount of each fuel combusted during each calendar month. [40 CFR 60.48c(g)(1) and (2)]
- c. The Permittee shall maintain these records for a period of two years following the date of such record. [40 CFR 60.48c(i)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the amount of fuel is not recorded or the records are not maintained as specified in Section 2.1 E.4.b and c.

#### 5. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

#### **Applicability** [40 CFR 63.7485, 40 CFR 63.7490, 40 CFR 63.7499(1)]

a. For this boiler (ID No. B05), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A, "General Provisions."

#### **Definitions and Nomenclature** [40 CFR 63.7575]

b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

#### 40 CFR Part 63 Subpart A General Provisions [40 CFR 63.7565]

c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD.

#### Compliance Date [40 CFR 63.7495(a)]

d. The Permittee shall comply with the applicable requirements upon startup of the source.

#### Notifications [40 CFR 63.7545]

- e. As specified in 40 CFR 63.9(b)(4) and (5), the Permittee shall submit an Initial Notification not later than 15 days after the actual date of startup of the affected source. [40 CFR 63.7545(c)]
- f. The Permittee shall submit an initial Notification of Compliance Status. The notification shall contain the following:
  - i. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, and description of the fuel(s) burned.
  - ii. the following certification(s) of compliance, as applicable:
  - iii. "This facility complies with the required initial tune-up according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)"; and

The notification must be signed by a responsible official and sent before the close of business on the 60th day following the completion of the initial tune-up.

[40 CFR 63.7545(e), 40 CFR 63.7530(d) and (f)]

#### General Compliance Requirements [40 CFR 63.7505(a), 40 CFR 63.7500(f)]

g. The Permittee shall be in compliance with the work practice standards in this subpart. These limits apply at all times the affected unit is operating.

#### Work Practice Standards [15A NCAC 02Q .0508(f)]

- h. The Permittee shall conduct a tune-up of the source(s) annually as specified below.
  - i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown.
  - ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
  - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The Permittee may delay the inspection until the next scheduled unit shutdown.
  - iv. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>X</sub> requirement to which the unit is subject.
  - v. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

[40 CFR 63.7500(a), 40 CFR 63.7540(a)(10)]

- i. For boiler (**ID No. B05**), each annual tune-up shall be conducted no more than 13 months after the previous tune-up. The initial tune-up shall be conducted no later than 13 months after the initial startup of the source. [40 CFR 63.7515(d)]
- j. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13), 40 CFR 63.7515(g)]
- k. At all times, the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]
- 1. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 E.5.e through Section 2.1 E.5.k are not met.

#### Recordkeeping Requirements [15A NCAC 02O .0508(f)]

- m. The Permittee must keep the following:
  - i. A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]
  - ii. Maintain on-site and submit, if requested by the Administrator, a report containing the information in Section 2.1 E.5.m.ii.(A) through Section 2.1 E.5.m.ii.(C) below:
    - (A) The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured before and after the adjustments of the source;
    - (B) A description of any corrective actions taken as a part of the combustion adjustment; and
    - (C) The type and amount of fuel used over the 12 months prior to the annual adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

[40 CFR 63.7540(a)(10)(vi)]

- iii. The associated records for Section 2.1 E.5.g through Section 2.1 E.5.k including the occurrence and duration of each malfunction of operation (i.e., process equipment) or the required air pollution control and monitoring equipment. [40 CFR 63.10(b)(2)]
- n. The Permittee shall:
  - i. maintain records in a form suitable and readily available for expeditious review;
  - ii. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
  - iii. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.

[40 CFR 63.7560, 40 CFR 63.10(b)(1)]

o. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained per Section 2.1 E.5.m and n.

#### **Reporting Requirements** [15A NCAC 02Q .0508(f)]

- p. The Permittee shall submit compliance reports to the DAQ on an annual basis. The first report shall cover the period beginning on the compliance date specified in Section 2.1 E.5.d and ending on the earliest December 31 following a complete 1-year period. Subsequent annual reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance reports postmarked on or before January 30. [40 CFR 63.7550(a) and (b), 40 CFR 63.10(a)(4) and (5)]
- q. The annual compliance report must also be submitted to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The Permittee shall use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, the Permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the Permittee shall submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The Permittee shall begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI [40 CFR 63.7550(h)(3)]
- r. The annual compliance report must contain the following information:
  - i. Company name and address;
  - ii. Process unit information, emissions limitations, and operating parameter limitations;
  - iii. Date of report and beginning and ending dates of the reporting period;
  - iv. The total operating time during the reporting period;
  - iv. If there are no deviations from the requirements of the work practice requirements in Section 2.1 E.5.h above, a statement that there were no deviations from the work practice standards during the reporting period; and
  - v. Include the date of the most recent tune-up for each unit required according to condition h. Include the date of the most recent burner inspection if it was not done as scheduled and was delayed until the next scheduled or unscheduled unit shutdown.

[40 CFR 63.7550(a) and (c), Table 9]

- s. If the Permittee has a period of noncompliance with a work practice standard for periods of startup and shutdown during the reporting period, the compliance report must also contain the following information:
  - i. A description of the period of noncompliance and which work practice standard from which the Permittee was in noncompliance; and
  - ii. Information on the number, duration, and cause of periods of noncompliance (including unknown cause), as applicable, and the corrective action taken.

[40 CFR 63.7540(b), 40 CFR 63.7550(a) and (d) and Table 9]

#### 2.2 Multiple Emission Source(s) Specific Limitations and Conditions

#### A. Facility-wide Affected Sources

The following table provides a summary of limits and standards for the emission source(s) described above:

| Pollutant                              | Limits/Standards                     | Applicable Regulation |
|--|--------------------------------------|-----------------------|
| Odors                                  | State-enforceable only               | 15A NCAC 02D .1806    |
|  | Odorous emissions must be controlled |                       |
| Particulate Matter (PM)                | Less than 144 tons per year          | 15A NCAC 02Q .0317    |
| Particulate Matter (PM <sub>10</sub> ) | Less than 121 tons per year          | Avoidance of 15A NCAC |
| Nitrogen Oxides                        | Less than 108.4 tons per year        | 02D .0530             |
| Carbon Monoxide                        | Less than 287 tons per year          |                       |

#### **State-enforceable only**

#### 1. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

a. The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

# 2. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major modification, the Permittee shall discharge into the atmosphere less than the following:
  - i. 144 tons of particulate matter per consecutive 12-month period;
  - ii. 121 tons of PM<sub>10</sub> per consecutive 12-month period;
  - iii. 108.4 tons of nitrogen oxide per consecutive 12-month period; and
  - iv. 287 tons of carbon monoxide per consecutive 12-month period.

#### **Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 A.2.a.i through Section 2.2 A.2.a.iv above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

#### Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. The Permittee shall keep monthly records of the amount of the following:
  - i. lumber dried in the kilns (**ID Nos. K-2 through K-7**);
  - ii. wood burned in the gasified wood-fired kiln (ID No. K-2); and
  - iii. wood burned in the boilers (**ID Nos. B01 through B04**)

The records shall be maintained in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the records are not maintained.

d. The Permittee shall calculate emissions of each pollutant listed in Section 2.2 A.2.a.i through Section 2.2 A.2.a.iv above. Calculations shall be made monthly using approved emission factors and recorded in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained or if the emissions of any pollutant exceed the limits in Section 2.2 A.2.a.i through Section 2.2 A.2.a.iv above.

#### **Reporting** [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The report shall contain:
  - i. the monthly emissions of each pollutant listed in Section 2.2 A.2.a.i through Section 2.2 A.2.a.iv above for each of the previous 17 months and for each of the six 12-month periods over the previous 17 months; and

- ii. the monthly amount of lumber dried in the kilns (**ID Nos. K-2 through K-7**), wood burned in the gasified wood-fired kilns (**ID No. K-2**), and wood burned in the boilers (**ID Nos. B01 through B04**) for each of the previous 17 months and for each of the six 12-month periods over the previous 17 months.
- iii. All instances of deviations from the requirements of this permit must be clearly identified.

# B. Four wood-fired boilers without flyash reinjection (ID Nos. B01 through B04) and

One natural gas-fired boiler (ID No. B05)

# 1. 15A NCAC 02D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS TO AVOID APPLICABILITY OF REQUIREMENTS OF PSD

a. The Permittee has used projected actual emissions to avoid applicability of prevention of significant deterioration requirements for the project to convert lumber kiln (ID No. K-6) to a continuous lumber kiln as specified in Air Permit Application No. 6200015.18A. In order to verify the assumptions used in the projected actual emissions calculations, the Permittee shall comply with the recordkeeping and reporting requirements in Section 2.2 B.1.b through Section 2.2 B.1.d, below.

#### Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- b. The Permittee shall maintain records of actual emissions from the boilers (**ID Nos. B01 through B05**) for the emissions of PM, PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, SO<sub>2</sub>, and CO in tons per year on a calendar year basis for ten years following the resumption of regular operations after the conversion of the kiln (**ID No. K-6**). The Permittee shall make the information documented and maintained under this condition available to the Director or the General Public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).
- c. The Permittee shall submit a report for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, SO<sub>2</sub>, and CO emissions to the Director within 60 days after the end of each calendar year during which the records in Section 2.2 B.1.b, must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c).
- d. The reported actual emissions for each of the ten calendar years for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, SO<sub>2</sub>, and CO will be compared to the respective projected actual emissions as included below:

| Pollutant         | Projected Actual Emissions* (Tons per Year) |
|-------------------|---|
| PM                | 20.9  |
| $PM_{10}$         | 19.3  |
| PM <sub>2.5</sub> | 13.1  |
| NOx               | 30.4  |
| $SO_2$            | 2.7   |
| CO                | 25.9  |

<sup>\*</sup> The projected actual emissions are not enforceable limitations. If the reported actual emissions exceed the projected actual emissions, the Permittee shall include in its annual report an explanation as to why actual emissions exceeded the projected actual emissions.

#### 2.3 Permit Shield for Non-applicable Requirements

The Permittee is shielded from the following nonapplicable requirements [15A NCAC 02Q .0512(a)(1)(B)].

A. 15A NCAC 02D .0524, 40 CFR Part 60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (SI ICE), is not applicable to the LPG-fired (liquefied petroleum gas) emergency generator (ID No. I-EG) because the generator is an existing emergency generator manufactured and placed into operation prior to June 12, 2006; thus, it pre-dates NSPS applicability.

### SECTION 3 - INSIGNIFICANT ACTIVITIES PER 15A NCAC 02Q .0503(8)

| Emission Source ID No. | Emission Source Description <sup>1,2</sup>         |
|------------------------|--|
| IF-FB                  | Flyash bin   |
| IF-FP                  | Flyash piles                                       |
| I-EG<br>MACT ZZZZ      | One LPG-fired emergency generator (105 kW; 141 HP) |

Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement (Federal or State) or that the Permittee is exempted from demonstrating compliance with any applicable requirement.

<sup>&</sup>lt;sup>2</sup> When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit."

#### SECTION 4 - GENERAL CONDITIONS (version 6.0, 01/07/2022)

This section describes terms and conditions applicable to this Title V facility.

#### A. General Provisions [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

- 1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
- 2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
- 3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
- 4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
- 5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
- 6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

#### B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application(s) and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

#### C. Severability Clause [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

#### D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance North Carolina Division of Air Quality 1641 Mail Service Center Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

#### E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

#### F. <u>Circumvention</u> - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

#### G. Title V Permit Modifications

- 1. Administrative Permit Amendments [15A NCAC 02Q .0514]
  - The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
- Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
   The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
- 3. Minor Permit Modifications [15A NCAC 02Q .0515]
  - The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
- 4. Significant Permit Modifications [15A NCAC 02Q .0516]
  - The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
- 5. Reopening for Cause [15A NCAC 02Q .0517]
  - The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

#### H. Changes Not Requiring Permit Modifications

1. Reporting Requirements [15A NCAC 02Q .0508(f)]

Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:

- a. changes in the information submitted in the application;
- b. changes that modify equipment or processes; or
- c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

- 2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
  - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
  - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
    - i. the changes are not a modification under Title I of the Federal Clean Air Act;
    - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
    - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made: and
    - iv. the Permittee shall attach the notice to the relevant permit.
  - c. The written notification shall include:
    - i. a description of the change;
    - ii. the date on which the change will occur;
    - iii. any change in emissions; and
    - iv. any permit term or condition that is no longer applicable as a result of the change.
  - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
- 3. Off Permit Changes [15A NCAC 02Q .0523(b)]

The Permittee may make changes in the operation or emissions without revising the permit if:

- a. the change affects only insignificant activities and the activities remain insignificant after the change; or
- b. the change is not covered under any applicable requirement.
- 4. Emissions Trading [15A NCAC 02Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

#### I.A Reporting Requirements for Excess Emissions [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

- 1. "Excess Emissions" means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)
- 2. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
- 3. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
  - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
    - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
      - name and location of the facility;
      - nature and cause of the malfunction or breakdown;
      - time when the malfunction or breakdown is first observed;
      - expected duration; and
      - estimated rate of emissions;
    - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
    - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

#### I.B Reporting Requirements for Permit Deviations [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

- "Permit Deviations" for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.
- 2. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) quarterly by notifying the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

#### I.C Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

- 1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
- 2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

#### J. **Emergency Provisions** [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

- An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the
  facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and
  that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases
  in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by
  improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
- 2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
- 3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
  - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
  - b. the permitted facility was at the time being properly operated;

- c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
- d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- 4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

#### K. Permit Renewal [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

#### L. Need to Halt or Reduce Activity Not a Defense [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#### M. <u>Duty to Provide Information (submittal of information)</u> [15A NCAC 02Q .0508(i)(9)]

- 1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
- 2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

#### N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

#### O. **Retention of Records** [15A NCAC 02O .0508(f) and 02O .0508(l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

#### P. Compliance Certification [15A NCAC 02O .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all terms and conditions in the permit (including emissions limitations, standards, or work practices), except for conditions identified as being State-enforceable Only. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

- 1. the identification of each term or condition of the permit that is the basis of the certification;
- 2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
- 3. whether compliance was continuous or intermittent;
- 4. the method(s) used for determining the compliance status of the source during the certification period;

- 5. each deviation and take it into account in the compliance certification; and
- 6. as possible exceptions to compliance, any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (CAM) occurred.

#### Q. Certification by Responsible Official [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

#### R. Permit Shield for Applicable Requirements [15A NCAC 02Q .0512]

- 1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
- 2. A permit shield shall not alter or affect:
  - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
  - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
  - c. the applicable requirements under Title IV; or
  - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
- 3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
- 4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

#### S. Termination, Modification, and Revocation of the Permit [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

- 1. the information contained in the application or presented in support thereof is determined to be incorrect;
- 2. the conditions under which the permit or permit renewal was granted have changed;
- 3. violations of conditions contained in the permit have occurred;
- 4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
- 5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

#### T. Insignificant Activities [15A NCAC 020 .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

#### U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

#### V. <u>Inspection and Entry</u> [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

- 1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
  - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
  - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
  - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
  - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

#### W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

- 1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
- 2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
- 3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

#### X. Annual Emission Inventory Requirements [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

#### Y. Confidential Information [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

#### Z. Construction and Operation Permits [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

#### AA. Standard Application Form and Required Information [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

#### BB. Financial Responsibility and Compliance History [15A NCAC 02Q .0507(d)(3)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

#### CC. Refrigerant Requirements (Stratospheric Ozone and Climate Protection) [15A NCAC 02Q .0501(d)]

- If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II
  ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR
  Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to
  the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40
  CFR Part 82 Subpart F.
- 2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
- 3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

#### DD. <u>Prevention of Accidental Releases - Section 112(r)</u> [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

#### EE. National Emission Standards Asbestos – 40 CFR Part 61, Subpart M [15A NCAC 02D .1110]

The Permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

#### FF. Title IV Allowances [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

#### GG. Air Pollution Emergency Episode [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

#### HH. Registration of Air Pollution Sources [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

#### II. Ambient Air Quality Standards [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

#### JJ. General Emissions Testing and Reporting Requirements [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .1110, or .1111 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance for emission sources subject to Rules .0524, .1110, or .1111, the Permittee shall provide and submit all notifications, conduct all testing, and submit all test reports in accordance with the requirements of 15A NCAC 02D .0524, .1110, or .1111, as applicable. Otherwise, if emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

- 1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
- 2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
- 3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
- 4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
  - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
    - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
    - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
    - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in 15A NCAC 02D .2600 if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
  - b. The Director may authorize the DAQ to conduct independent tests of any source subject to a rule in 15A NCAC 02D to determine the compliance status of that source or to verify any test data submitted relating to that source.

Any test conducted by the Division of Air Quality using the appropriate testing procedures described in 15A NCAC 02D .2600 has precedence over all other tests.

#### KK. Reopening for Cause [15A NCAC 02Q .0517]

- 1. A permit shall be reopened and revised under the following circumstances:
  - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
  - additional requirements (including excess emission requirements) become applicable to a source covered by Title IV:
  - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
  - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
- 3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
- 4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
- 5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

#### LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

#### MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

#### NN. Specific Permit Modifications [15A NCAC 02Q .0501 and .0523]

- 1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
- 2. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
- 3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (Air Permitting Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) in writing at least seven days before the change is made.
  - a. The written notification shall include:
    - i. a description of the change at the facility;
    - ii. the date on which the change will occur;
    - iii. any change in emissions; and
    - iv. any permit term or condition that is no longer applicable as a result of the change.

b. In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

#### OO. Third Party Participation and EPA Review [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal EPA, EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period